Supplemental Figure 1. ABR amplitude Z-score by stimulus intensity functions for tones presented in broadband noise with a silent spectral notch. Functions are shown for center frequencies (CF) of 2, 3, and 4 kHz. The normalized notchwidth (NW) is the bandwidth of the spectral notch divided by the CF (e.g. a spectral notch of 800 Hz at a CF of 4 kHz would have a NW of 0.2). As the NW increases the auditory filter is unmasked and the threshold decreases. We determined the threshold for each tone by finding the intercept of the amplitude by stimulus intensity function with the upper bound of the 99% confidence interval (Z-score = 2.56). The 99% confidence limit is indicated by the dotted line. These data are from a single female house sparrow. The individual was chosen haphazardly.
Supplemental Figure 2. ABR threshold by notchwidth functions for a single female house sparrow. The individual was chosen haphazardly. The ABR threshold by notchwidth functions were then fit to a two-parameter rounded exponential model. We used parameters from this function to determine the equivalent rectangular bandwidth for each auditory filter.
Supplemental Figure 3. Mean (± SE) ABR threshold by notchwidth functions. Columns contain data for each sex×season combination. Each row contains data for a single center frequency (CF). These ABR threshold by notchwidth functions are used to determine auditory filter shape. Generally, shallow functions suggest that auditory filters will be broad (thresholds improve gradually because the filter is slowly unmasked by increasing the bandwidth of the silent spectral notch). Steep functions suggest that auditory filters will be narrow (there are rapid changes in the thresholds because the filter is rapidly unmasked by changing the bandwidth silent spectral notch).